

Date:
User:

Thursday, 11/29/2007 11:17:54 AM
Kim Johnston

Process Sheet

Dart Aerospace Ltd.

Customer : CU-DAR001 Dart Helicopters Services
Job Number : 36045
Estimate Number : 10606
P.O. Number : N/A
This Issue : 11/29/2007 S.O. No. : N/A
Prsht Rev. : NC
First Issue : 11/29/2007 Type : SMALL /MED FAB
Previous Run : 33113
Written By :
Checked & Approved By :
Comment : Est: A 05.05.12 New issue KJ/JLM
Est Rev:B Now on Waterjet 06-10-03 JLM

Drawing Name : WEARPLATE
Part Number : D33193
Drawing Number : D3319 REV. B
Project Number : N/A
Drawing Revision : B
Material : N/A
Due Date : 12/6/2007 Qty: 20 Um: Each

(6)

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M1010S18GA 1010/1025/A21/6aA SHEET .048



Comment: Qty.: 3.4150 sf(s)/Unit Total : 68.3004 sf(s)

1010/1025/A21/6aA SHEET .048" Thick

Batch: 106348 IB 07-12-4

71.715

2.0 WATER JET FLOW WATER JET



Comment: FLOW WATER JET

1-Cut as per Dwg D3319

Dwg Rev: B

Prog Rev: B

IB 07-12-4

2-Deburr if necessary

IB 07-12-4

(21)

3.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

IB 07-12-4

4.0 QC8 SECOND CHECK



Comment: SECOND CHECK

5 07/12/04

counts

(21)

5.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Deburr if necessary

05/04/12/05 (21)

SD

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 11/29/2007 11:17:54 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 36045

Part Number: D33193

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Form using DT8326 & DT8261 as per Dwg D3319 Rev: B

SR 07/12/05

(21)

7.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

counts
5 07/12/05 (X21)

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld hard surface using D3319-3T2 per QSI 004 and Dwg D3319 Rev: D

Qty Part Number

Description

Batch

A/R N/A

7560 Hardcoat Rod

M105844

FC 08/01/04 (6)

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

08-01-04 (6)

10.0

POWDER COATING

POWDER COATING



M105642



(6X)

Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

m-h 08/01/05

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

08/01/07 (6)

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify on inside surface using a permanent fine point marker with the following:

TCCA-PDA, Dart Aerospace Ltd.

P/N: D3319-3, B/N: BXXXXX

For Product Eligibility see PDA05-18

and Stock

Location: 496

08/01/07 (6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: 10 Date: 08/01/07
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 11/29/2007 11:17:54 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 36045

Part Number: D33193

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

2008/01/07

Job Completion



mi 2008/1/7 6X
W

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	36045
Description: Wearplate		Part Number:	D3319-3
Inspection Dwg: D3319	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

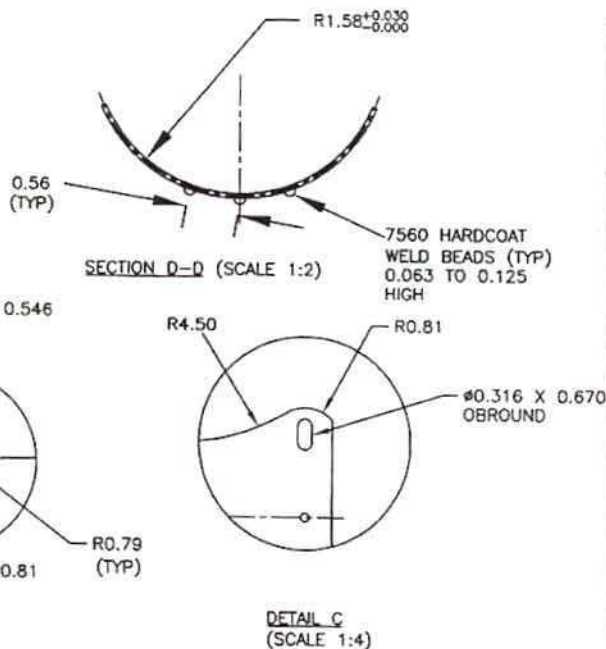
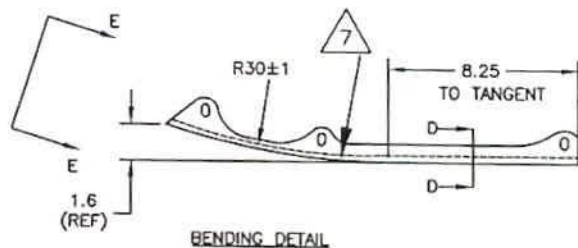
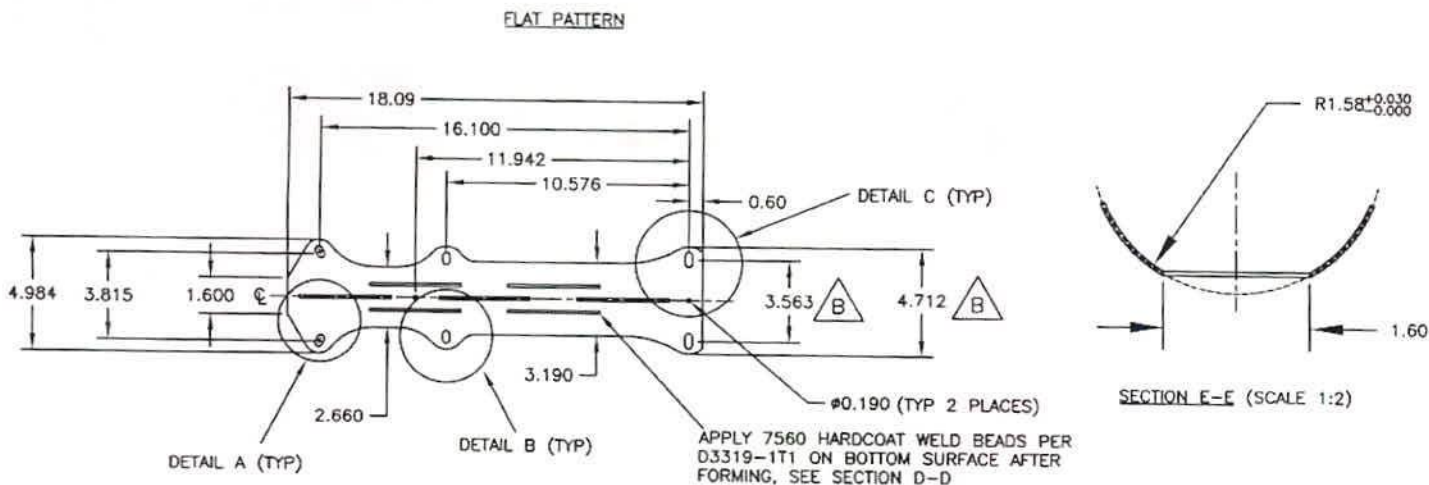
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
75.52	+/-0.030	75.52	*			
74.420	+/-0.010	74.420	*			
62.770	+/-0.010	62.770	*			
52.890	+/-0.010	52.890	*			
30.790	+/-0.010	30.790	*			
8.690	+/-0.010	8.690	*			
0.60	+/-0.030	.60	*			
2.690	+/-0.010	2.700	*			
2.940	+/-0.010	2.950	*			
3.527	+/-0.010	3.520	*			
4.518	+/-0.010	4.516	*			
Ø0.190	+0.005/-0.001	.190	*			
2.940	+/-0.010	2.948	*			
2.940	+/-0.010	2.948	*			
2.690	+/-0.010	2.700	*			
5.063	+/-0.010	5.061	*			
6.163	+/-0.010	6.163	*			
Ø0.316 x 0.607	+0.006/-0.001 x +/-0.010	.315 x .603	*			
0.048	+/-0.010	.045	*			

Measured by: HB	Audited by: J	Prototype Approval:	N/A
Date: 07-12-4	Date: 07/12/04	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.07.18	New Issue	KJ/JLM	EE

DART



D3319-1 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N BXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

DESIGN	DRAWN BY	DART AEROSPACE LTD
P1	04	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
		D3319
DATE	TITLE	REV. B
05.06.06	WEARPLATE	SHEET 1 OF 5
A	04.09.24	NEW ISSUE
B	05.06.06	WIDEN HOLES, REDUCE WIDTH -3/-5/-7
		SCALE 1:8

RELEASED
05.09.30

CONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

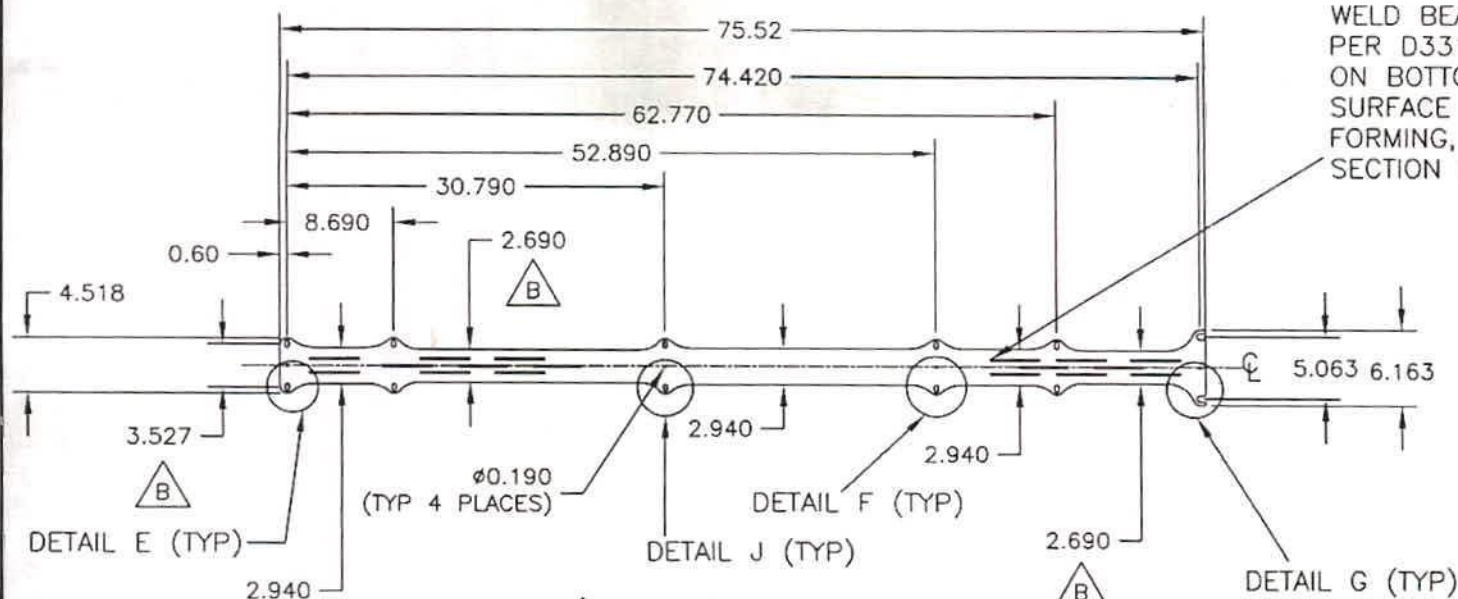
NO. 36045
WORK ORDER

DART

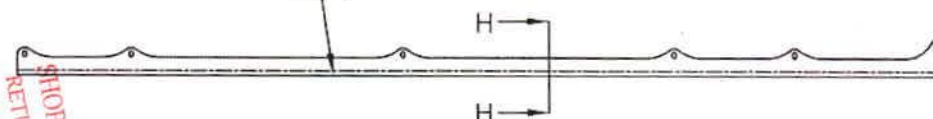
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CHECKED <i>PH</i>	APPROVED <i>PH</i>	HAMKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. B
05.06.06	D3319	SHEET 2 OF 5
	TITLE	SCALE
	WEARPLATE	1:15

APPLY 7560
HARDCOAT
WELD BEADS
PER D3319-3T1
ON BOTTOM
SURFACE AFTER
FORMING, SEE
SECTION H-H

FLAT PATTERN



BENDING DETAIL



NO. 3005
WORK ORDER
UNCONTROLLED COPY
ENGINEERING
SUBJECT TO AMENDMENT
WITHOUT NOTICE
RETURN TO
SHOP COPY

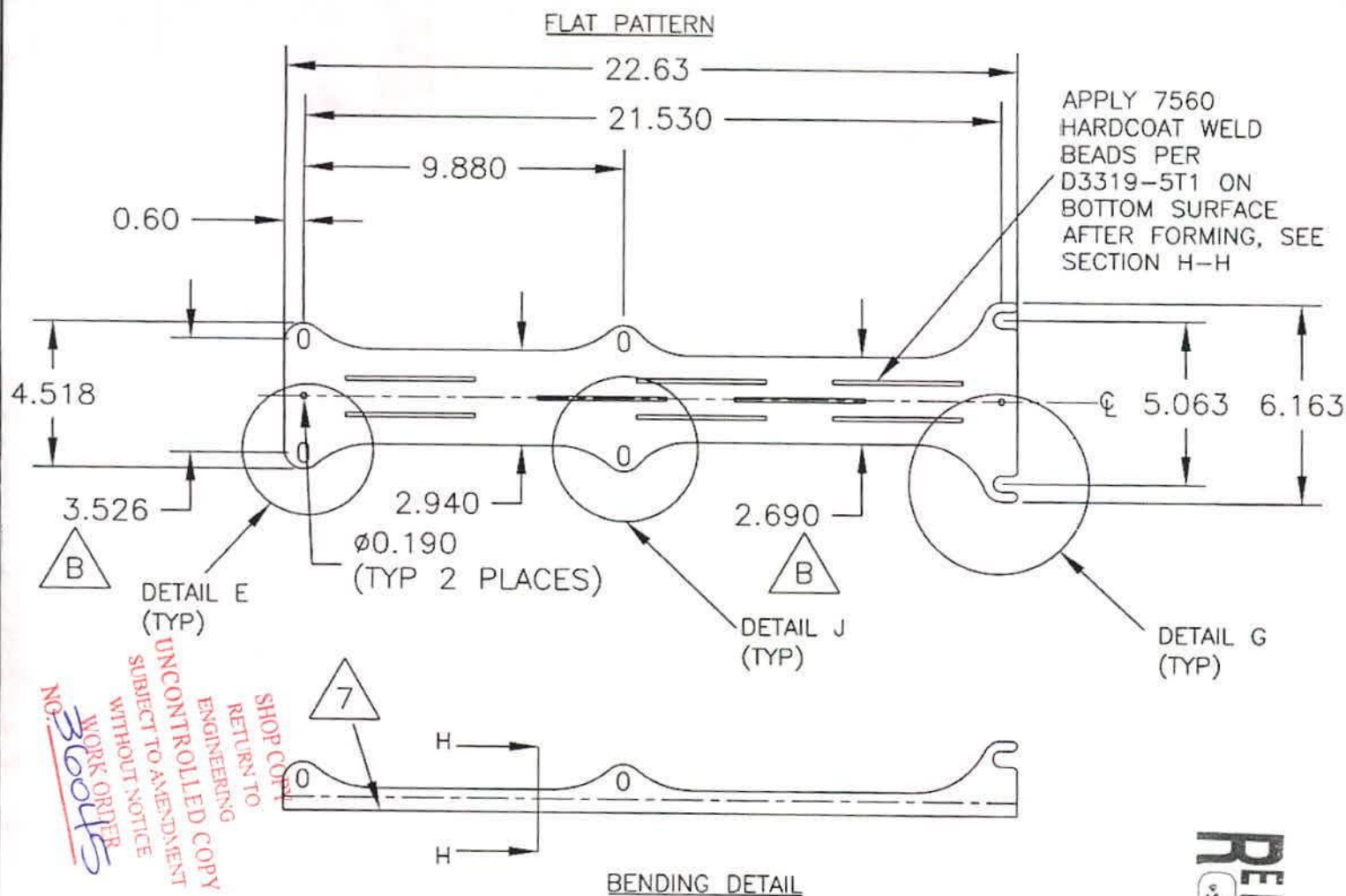
D3319-3 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-3 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

RELEASED
05 07 30

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DESIGN D41	DRAWN BY B4	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D3319	REV. B SHEET 3 OF 5
DATE 05.06.06		TITLE WEARPLATE	SCALE 1:5



D3319-5 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21,
38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-5 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

05-09-30 *AW*

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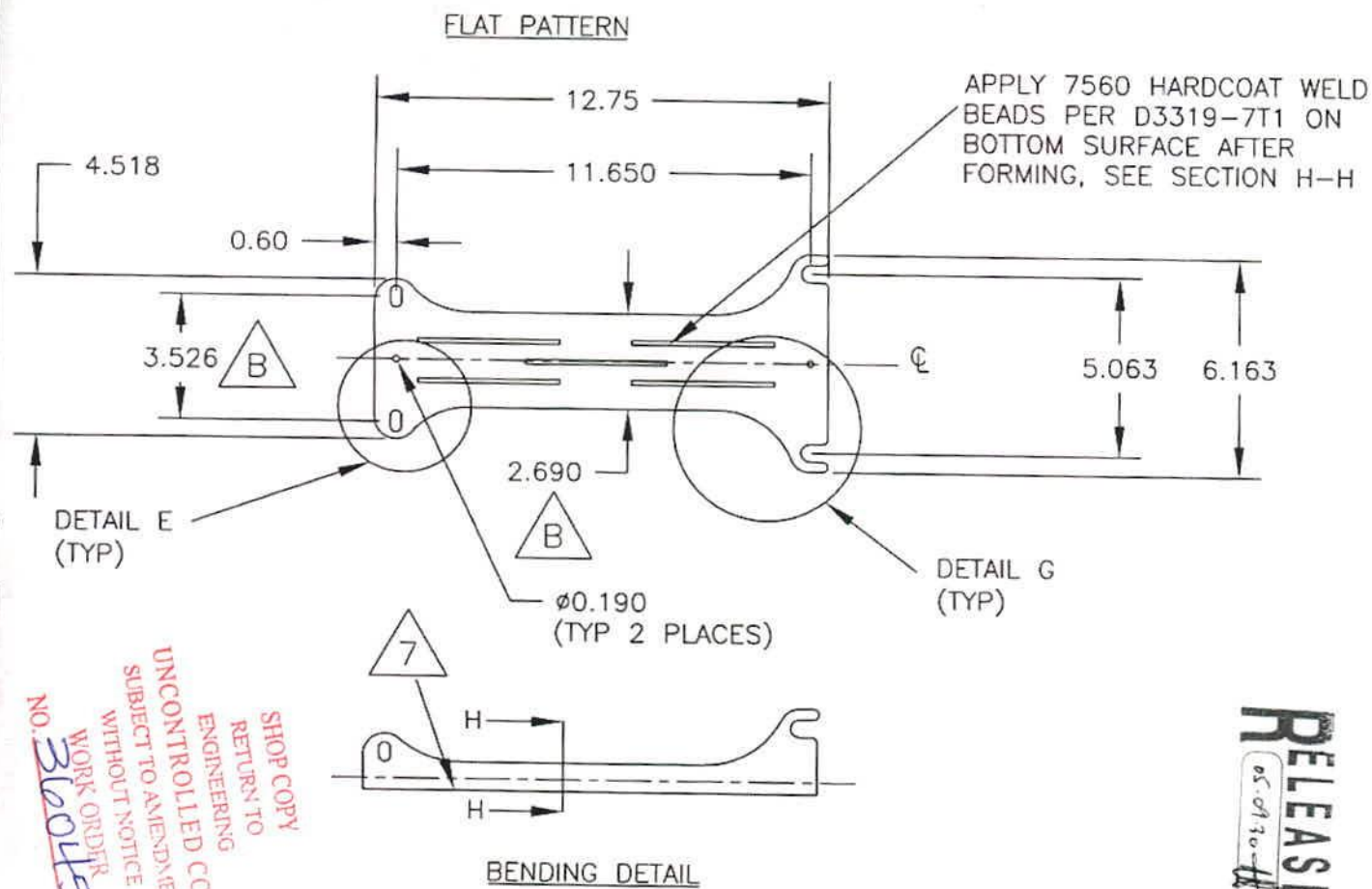
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DART

DESIGN	PH	DRAWN BY	PH	DART AEROSPACE LTD
CHECKED	PH	APPROVED	PH	HAWKESBURY, ONTARIO, CANADA
DATE	05.06.06	DRAWING NO.	D3319	REV. B
		TITLE	WEARPLATE	SHEET 4 OF 5
				SCALE 1:5

RELEASED
05.01.30-41



D3319-7 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-7 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

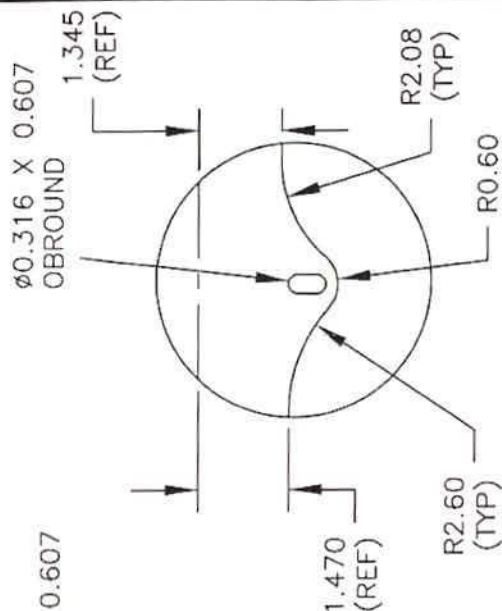
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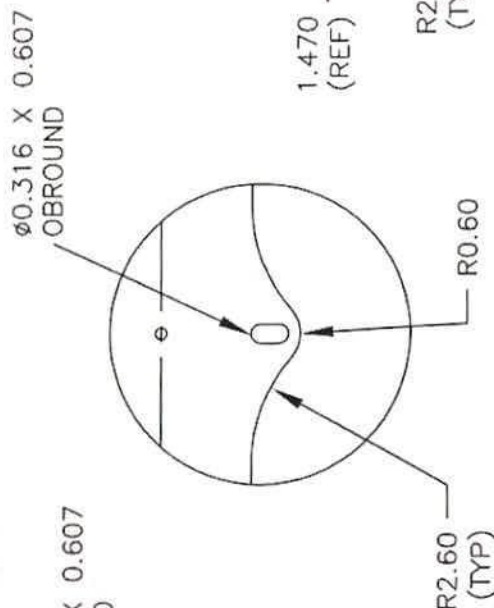
DART

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D3319	REV. B SHEET 5 OF 5
DATE 05.06.06	TITLE WEARPLATE		SCALE 1:3

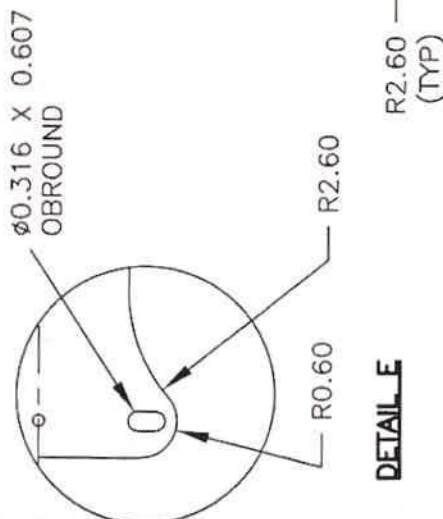
RELEASED
05.09.30



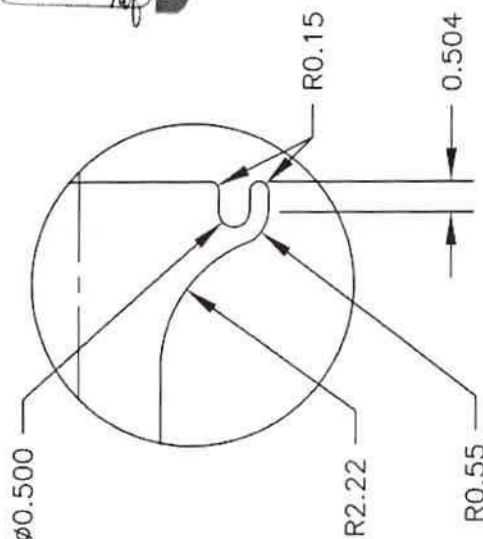
DETAIL J



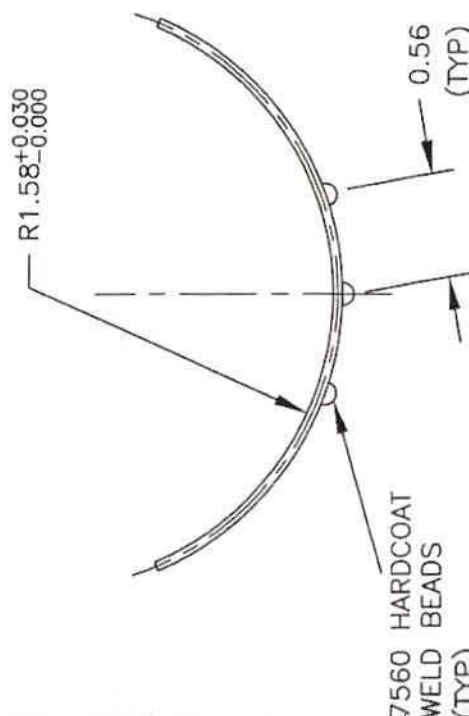
DETAIL F



DETAIL E



DETAIL G



**SECTION H-H
(SCALE 1:1)**

7560 HARDCOAT
WELD BEADS
(TYP)
0.063 TO 0.125
HIGH

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 36045

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